About This Manual

This chapter provides a high-level overview of the *JUNOS Internet Softw are System Log Messages Reference*.

Objectives on page xix

Audience on page xx

Document Organization on page xxi

Chapter Organization on page xxii

Documentation Conventions on page xxii

List of Technical Publications on page xxiii

Documentation Feedback on page xxiv

How to Request Support on page xxiv

Objectives

This manual describes system log messages generated by the JUNOS Internet software. Use the information in the manual to interpret system log messages and determine the appropriate corrective action for error conditions.

This manual documents Release 5.6 of the JUNOS Internet software. To obtain additional information about the JUNOS software—either corrections to information in this manual or information that might have been omitted from this manual—refer to the software release notes.

This manual is not provided in printed form, but is included on the documentation CD-ROM. To obtain the most current version of this manual and the most current version of the software release notes, refer to the product documentation page on the Juniper Networks Web site, which is located at http://www.juniper.net/. To order printed copies of other Juniper Networks manuals or a documentation CD-ROM, please contact your sales representative.



This version of the *JUNOS Internet Softw are System Log Messages* manual documents only some of the JUNOS system log messages. The project to document these messages is ongoing, and this manual will be updated for each release of the JUNOS Internet software.

Audience

This manual is designed for network administrators who are configuring or monitoring a Juniper Networks router. It assumes that you have a broad understanding of networks in general, the Internet in particular, networking principles, and network configuration. This manual assumes that you are familiar with one or more of the following Internet routing protocols: Border Gateway Protocol (BGP), Routing Information Protocol (RIP), Intermediate System-to-Intermediate System (IS-IS), Open Shortest Path First (OSPF), Internet Control Message Protocol (ICMP) router discovery, Internet Group Management Protocol (IGMP), Distance Vector Multicast Routing Protocol (DVMRP), Protocol Independent Multicast (PIM), Multiprotocol Label Switching (MPLS), Resource Reservation Protocol (RSVP), and Simple Network Management Protocol (SNMP).

The target audiences for this manual are:

Network Operations Center (NOC) personnel who are analyzing system files

Operations support staff who write the rules for system log parsing tools, such as MicroMuse ${\sf NetCool}$

Personnel who configure the router

Document Organization

This manual contains the following parts and chapters:

Preface, "About This Manual" (this chapter), provides a brief description of the contents and organization of this manual and describes how to obtain customer support.

Part 1, "Overview," provides an introduction to JUNOS system log messages:

Chapter 1, "System Log Messages Overview," provides an overview of how to configure system logging and interpret system log messages.

Part 2, "System Log Messages," lists the system log messages generated by each JUNOS software process, organized alphabetically by the prefix on the message code:

Chapter 2, "ACCT System Log Messages," describes the system log messages generated by the accounting statistics process.

Chapter 3, "BOOTPD System Log Messages," describes the system log messages generated by the boot parameter process (tnp.bootpd).

Chapter 4, "CHASSISD System Log Messages," describes the system log messages generated by the chassis process (chassisd).

Chapter 5, "DCD System Log Messages," describes the system log messages generated by the interface process (dcd).

Chapter 6, "FSAD System Log Messages," describes the system log messages generated by the File System Access process (fsad).

Chapter 7, "GGSN System Log Messages," describes system log messages generated by the Services Physical Interface Cards (PICs) process (serviced).

Chapter 8, "JADE System Log Messages," describes the system log messages generated by the JUNOScript authentication process (jade).

Chapter 9, "LIBJNX System Log Messages," describes system log messages generated by routines in the libjuniper library.

Chapter 10, "LIBSERVICED System Log Messages" describes system log messages generated by the Services PICs process (serviced).

Chapter 11, "MIB2D System Log Messages," describes the system log messages generated by the Management Information Base II (MIB II) process (mib2d).

Chapter 12, "NASD System Log Messages," describes the system log messages generated by the Network Access Server process (nasd).

Chapter 13, "PWC System Log Messages," describes the system log messages generated by the Process Watch Controller process (pwc).

Chapter 14, "RMOPD System Log Messages," describes the system log messages generated by the Simple Network Management Protocol (SNMP) remote operations process (rmopd).

Chapter 15, "RPD System Log Messages," describes the system log messages generated by the routing protocol process (rpd).

Chapter 16, "SERVICED System Log Messages" describes system log messages generated by the Services PICs process (serviced).

Chapter 17, "SNMPD System Log Messages," describes the system log messages generated by the SNMP agent process (snmpd).

Chapter 18, "SNMP System Log Messages," describes the system log messages generated by processes that perform SNMP operations or generate SNMP traps.

Chapter 19, "TFTPD System Log Messages," describes the system log messages generated by the Trivial File Transfer Protocol (TFTP) process (tnp.tftpd).

Chapter 20, "UI System Log Messages," describes the system log messages related to the user interface, generated by the command-line interface (CLI) and the management process (mgd).

This manual also contains an index.

Chapter Organization

Most chapters in this manual consist of reference entries for the system log messages generated by a JUNOS software process. For information about the sections in each entry, see "Interpret System Log Message Descriptions" on page 18.

Documentation Conventions

This manual uses the following text conventions:

Statements, commands, filenames, directory names, IP addresses, and configuration hierarchy levels are shown in a sans serif font. In the following example, stub is a statement name and [edit protocols ospf area *area-id*] is a configuration hierarchy level:

To configure a stub area, include the stub statement at the [edit protocols ospf area area-id] hierarchy level:

In examples, text that you type literally is shown in bold. In the following example, you type the word show:

```
[edit protocols ospf area area-id] cli# show stub <default-metric metric>
```

Examples of command output are generally shown in a fixed-width font to preserve the column alignment. For example:

> show interfaces terse

Interface	${\tt Admin}$	Link	Proto	Local	Remote
at-1/3/0	up	up			
at-1/3/0.0	up	up		1.0.0.1	> 1.0.0.2
			iso		
fxp0	up	up			
fxp0.0	up	up	inet	192.168.5.59/24	

List of Technical Publications

Table 1 lists the software and hardware books for Juniper Networks routers and describes the contents of each book.

Table 1: Juniper Networks Technical Documentation

Book	Description		
JUNOS Internet Software Configuration Guid	tes		
Getting Started	Provides an overview of the JUNOS Internet software and describes how to install and upgrade the software. This manual also describes how to configure system management functions and how to configure the chassis, including user accounts, passwords, and redundancy.		
Interfaces and Class of Service	Provides an overview of the interface and class-of-service functions of the JUNOS Internet software and describes how to configure the interfaces on the router.		
MPLS Applications	Provides an overview of traffic engineering concepts and describes how to configure traffic engineering protocols.		
Multicast	Provides an overview of multicast concepts and describes how to configure multicast routing protocols.		
Network Management	Provides an overview of network management concepts and describes how to configure various network management features, such as SNMP, accounting options, and cflowd.		
Policy Frame work	Provides an overview of policy concepts and describes how to configure routing policy, firewall filt and forwarding options.		
Routing and R outing Protocols	Provides an overview of routing concepts and describes how to configure routing, routing instances, and unicast routing protocols.		
VPNs	Provides an overview of Layer 2 and Layer 3 Virtual Private Networks (VPNs), describes how to configure VPNs, and provides configuration examples.		
JUNOS Internet Software References			
Operational Mode Command R eference: Interfaces	Describes the JUNOS Internet software operational mode commands you use to monitor and troubleshoot interfaces on Juniper Networks M-series and T-series routers.		
Operational Mode Command R eference: Protocols, Class of Service , Chassis, and Management	Describes the JUNOS Internet software operational mode commands you use to monitor and troubleshoot most aspects of Juniper Networks M-series and T-series routers.		
System Log Messages R eference	Describes how to access and interpret system log messages generated by JUNOS software modules and provides a reference page for each message.		
JUNOScript API Documentation	'		
JUNOScript API Guide	Describes how to use the JUNOScript API to monitor and configure Juniper Networks routers.		
JUNOScript API R eference	Provides a reference page for each tag in the JUNOScript API.		
JUNOS Internet Software Comprehensive In	dex		
Compr ehensiv e Inde x	Provides a complete index of all JUNOS Internet software books and the JUNOScript API Guide .		
Hardware Documentation			
Hardware Guide	Describes how to install, maintain, and troubleshoot routers and router components. Each router platform (M5 and M10 routers, M20 router, M40 router, M40e router, M160 router, T320 router, and T640 routing node) has its own hardware guide.		
PIC Guide	Describes the router Physical Interface Cards (PICs). Each router platform has its own PIC guide.		

Documentation Feedback

We are always interested in hearing from our customers. Please let us know what you like and do not like about the Juniper Networks documentation, and let us know of any suggestions you have for improving the documentation. Also, let us know if you find any mistakes in the documentation. Send your feedback to techpubs-comments@juniper.net.

How to Request Support

For technical support, contact Juniper Networks at support@juniper.net, or at 1-888-314-JTAC (within the United States) or 408-745-2121 (from outside the United States).